

# **Unit Three**

# **Phonetics 2**

# **English Consonants**

# **Sounds and Letters**

## **Revisiting:**

- Phonetics: It is the study of the sounds made by the human voice in speech.
- Linguistics: The scientific study of language.

# **Branches of Phonetics:**

**There are three branches of phonetics:**

- 1- Articulatory Phonetics: Describes how speech sounds are produced or articulated in various parts of the mouth and throat.
- 2- Acoustic Phonetics: Investigates how speech sounds are transmitted as vibrations in the air.
- 3- Auditory Phonetics: The study of how speech sounds are perceived or received by the hearer.

# Phonetics:

- As mentioned before letters are used in writing while sounds are used in speech.

- Letters have no meaning on their own.

a- b- c- d- m- l- h- e- i- w- r- y

- but when combined they produce words

c+a+t =

cati[www.bbc.co.uk/worldservice/learningenglish/multimedia/pron/](http://www.bbc.co.uk/worldservice/learningenglish/multimedia/pron/)

Activities No. 1-2-3

See CB page 30 -31- 32

### **Exercise (1) [from: BBC Learning English]**

Look at the words below and put them into the correct column based on the number of sounds each word has. Note that the number of letters and the number of sounds is always different in these words.

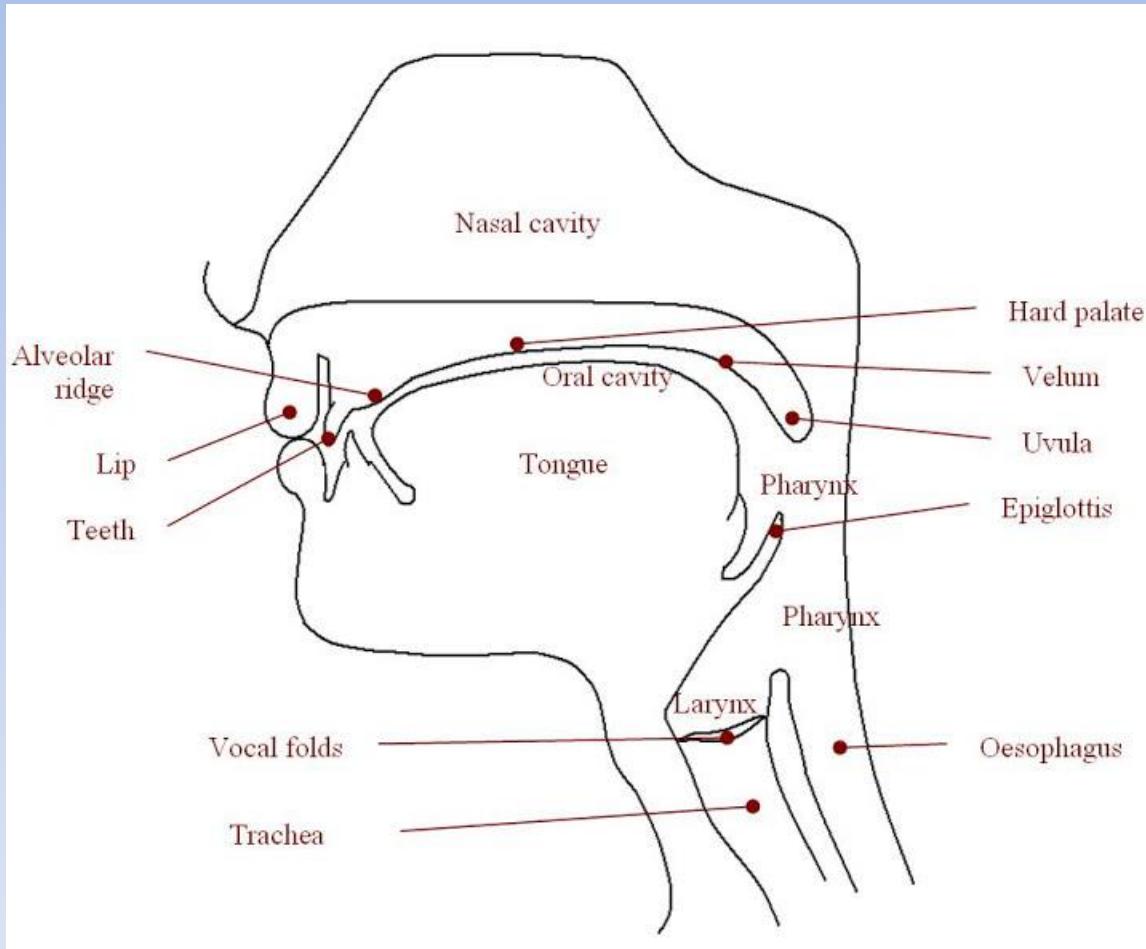
No	Word	2 sounds	3 sounds	4 sounds	5 sounds	6 sounds
1.	horse					
2.	caught					
3.	cow					
4.	carrot					
5.	heart					
6.	through					
7.	island					
8.	know					
9.	chemist					
10.	singer					

### **Exercise (1) [from: BBC Learning English]**

Look at the words below and put them into the correct column based on the number of sounds each word has. Note that the number of letters and the number of sounds is always different in these words.

1.	judge					
2.	daughter					
3.	business					
4.	treasure					
5.	thorough					
6.	enough					
7.	knowledge					
8.	singing					
9.	thinking					
10.	door					
11.	sugar					
12.	cupboard					
13.	more					
14.	laugh					
15.	check					

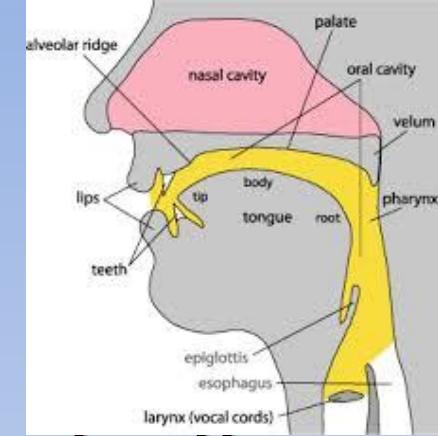
# Organs of Speech



## 2- Organs of Speech

1. Speech sounds are produced by air coming from the lungs and passing through the mouth or through the nose.
- The muscles and organs that take part in producing sounds are called **organs of speech.**

## 2- Organs of Speech



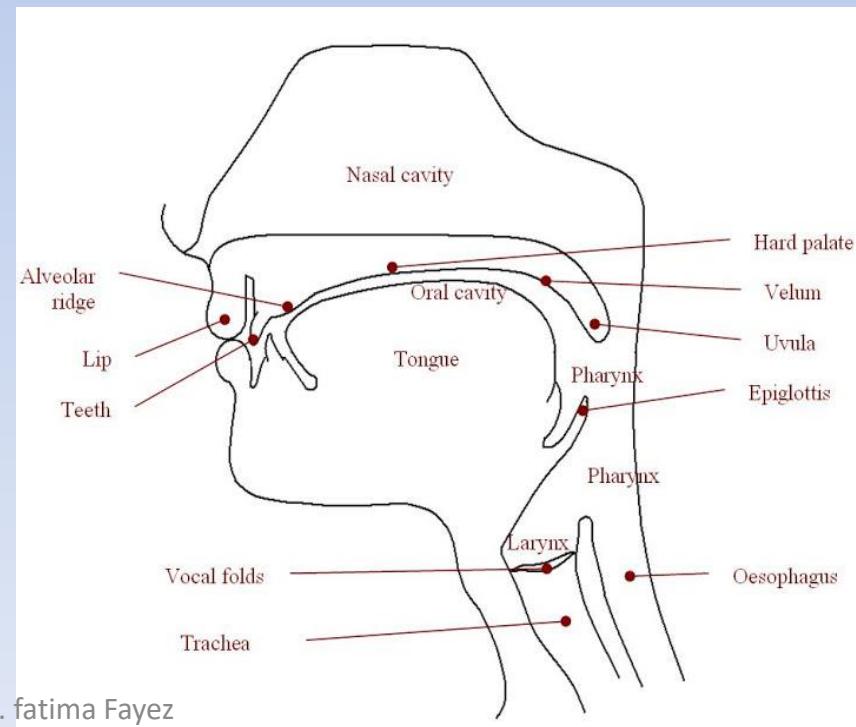
2- **Vocal tract:** This term refers to the cavities in the head and neck associated with the production of speech.

These are: **the oral cavity, the nasal cavity and the pharynx.**

- Go to:  
<http://soundsofspeech.uiowa.edu/index.html#english>

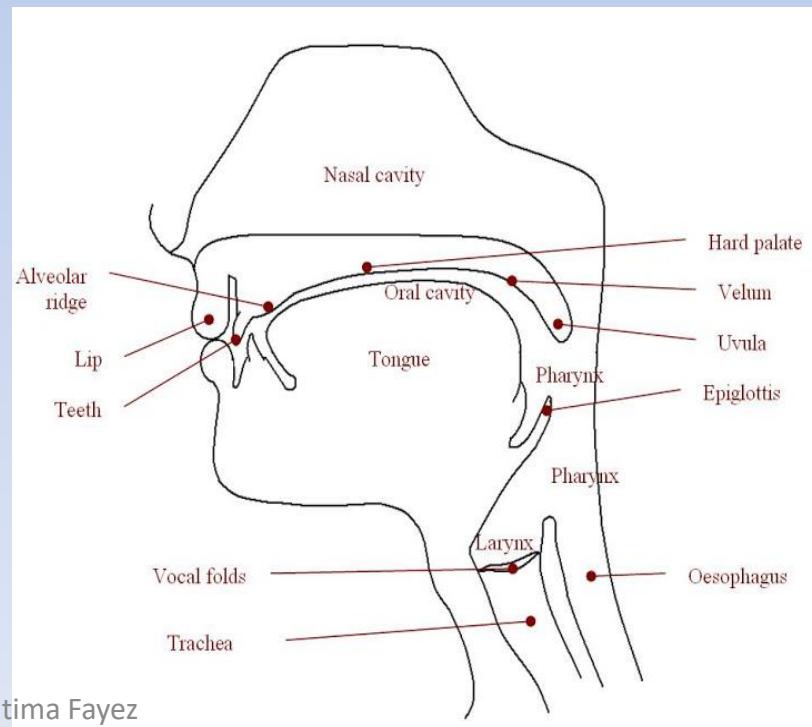
# Organs of speech

1- Windpipe (trachea): The tube which carries air out from the lungs to the larynx and the vocal tract.



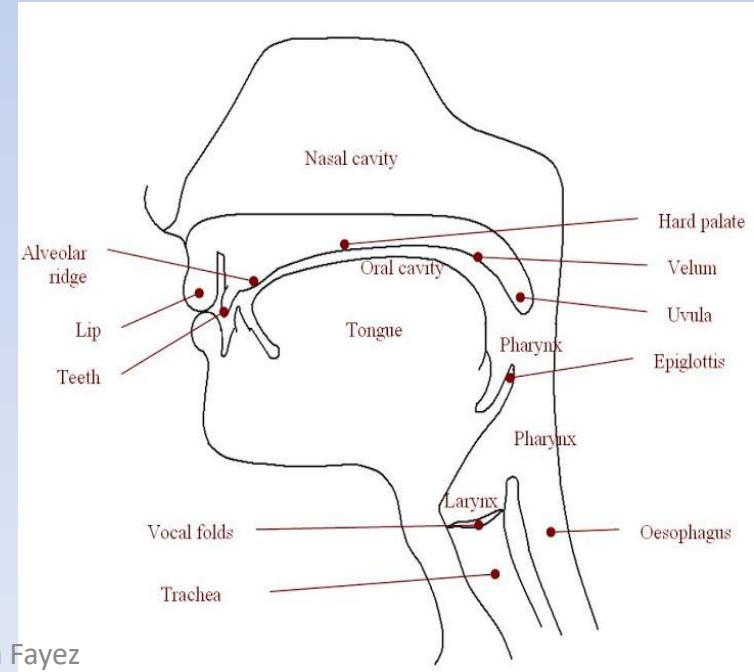
# Organs of speech

2- The Larynx: The larynx is known as Adam's Apple, or the Voice box. The chief importance of the Larynx is that it contains the vocal cords.



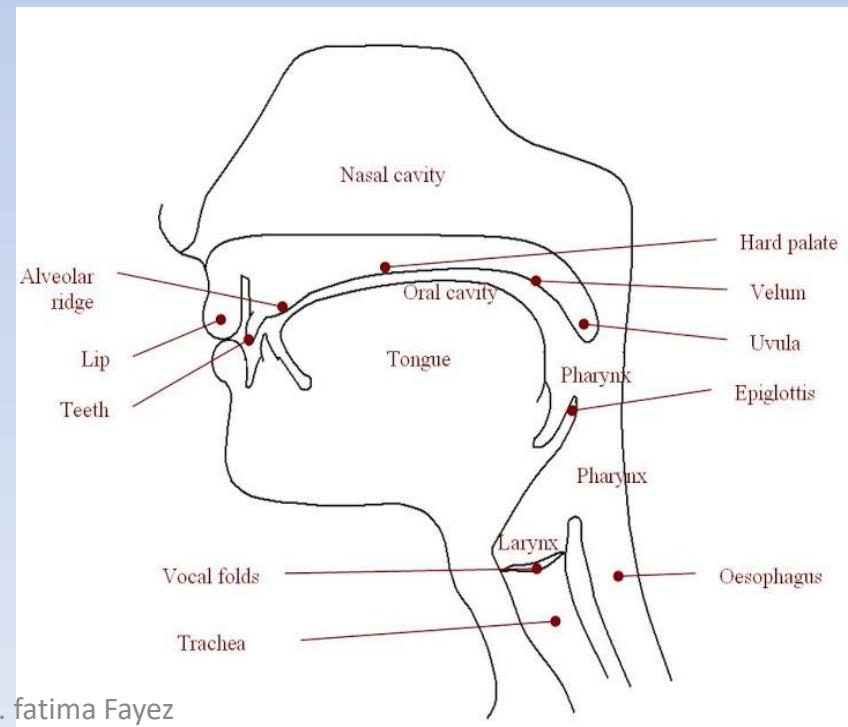
# Organs of speech

3. Vocal Cords: They are a pair of folds or muscles placed inside Adam's Apple. Sounds produced are voiced sounds when they are vibrating or voiceless when no vibration



# Organs of speech

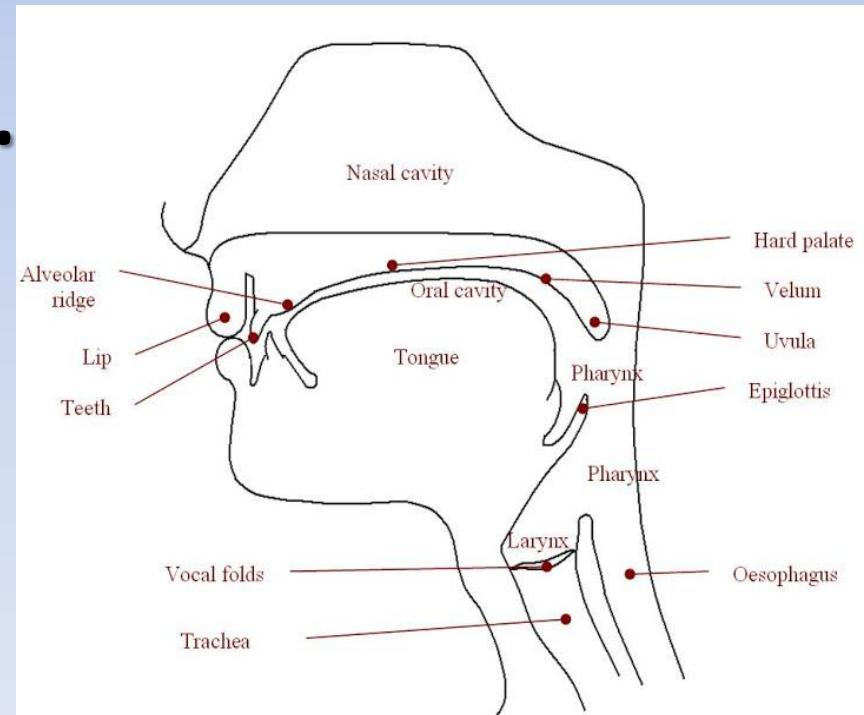
4. The pharynx: It is the soft part at the top of the throat which connects the mouth and the nose to the larynx.



# Organs of speech

5. Oral Cavity (mouth): it has the following organs:

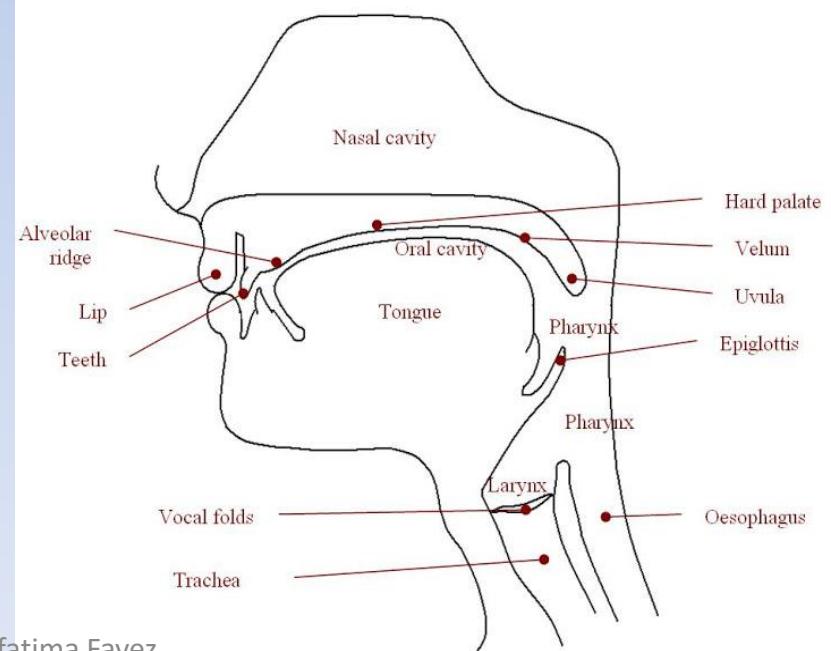
- a) The tongue.
- b) The roof of mouth.
- c) The lips.



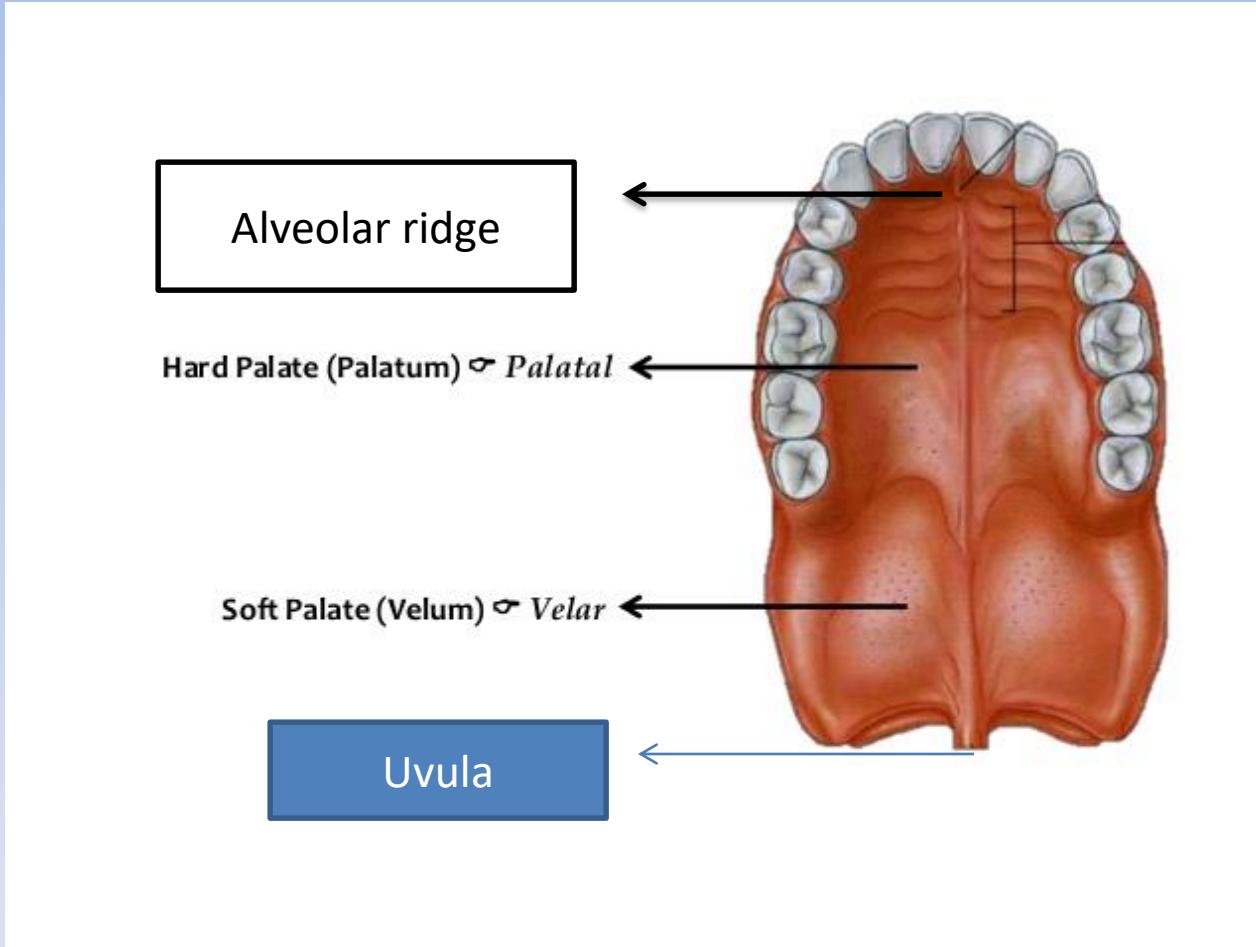
# Organs of speech

A. The tongue : The most important organ of speech because it can perform many movements that modify the airflow and thus produce different sounds.

- Tip
- Blade
- Front
- Back
- Root



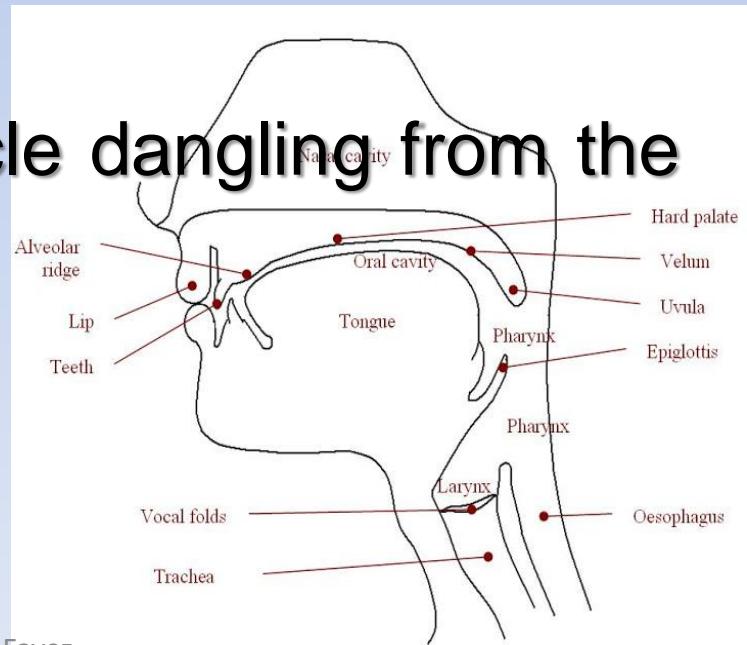
# Roof of the Mouth



# Organs of speech

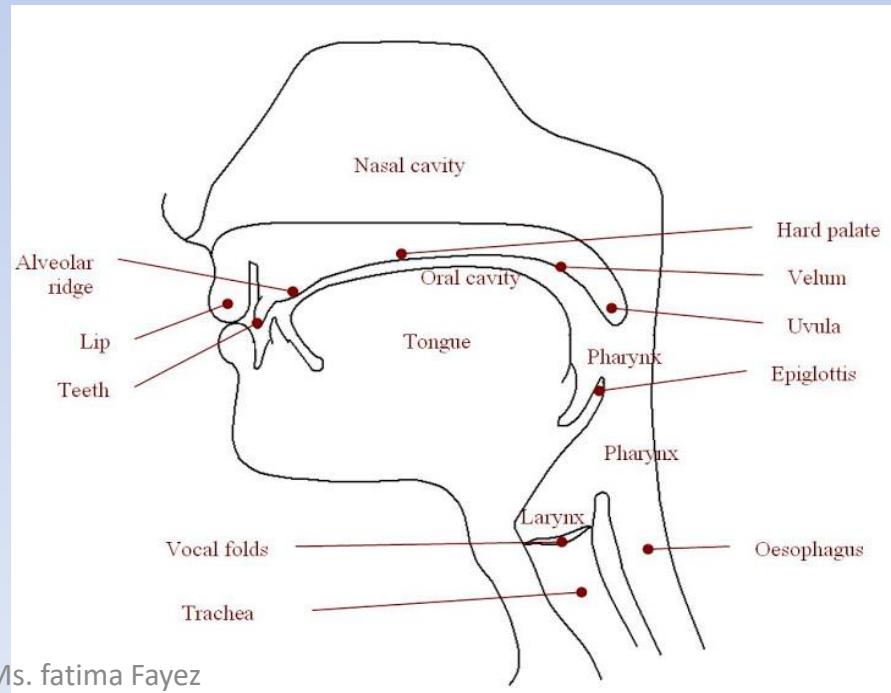
B) Roof of the mouth. It is divided into 4 parts:

1. Alveolar ridge: behind the teeth
2. The Hard Palate: behind the alveolar ridge
3. The Soft Palate. ( Velum): the back part of the roof of the mouth
4. The Uvula: the small muscle dangling from the velum.



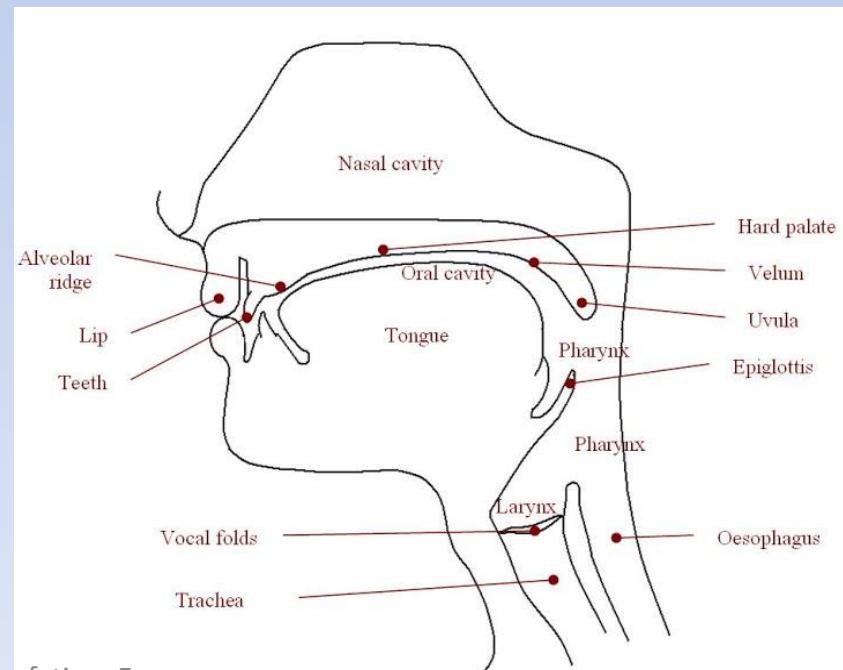
# Organs of speech

- c) The Lips. The lips play an important role in modifying and controlling the airflow. They can be closed , spread or rounded. These positions affect the sound quality.



# Organs of speech

6. The Nasal cavity: It extends from the upper part of the Pharynx to the nostrils. When the velum is lowered the nasal sounds are produced.



# **Organs of speech**

## **Important Note:**

None of the speech organs is used exclusively for the production of sounds.

# Organs of speech

## How do Phoneticians Describe sounds?

3. A phonetician is a person who studies and describes human sounds.
- Phoneticians distinguish between 2 major classes of sounds:  
**Consonants and Vowels.**  
As well as between **active and passive articulators.**

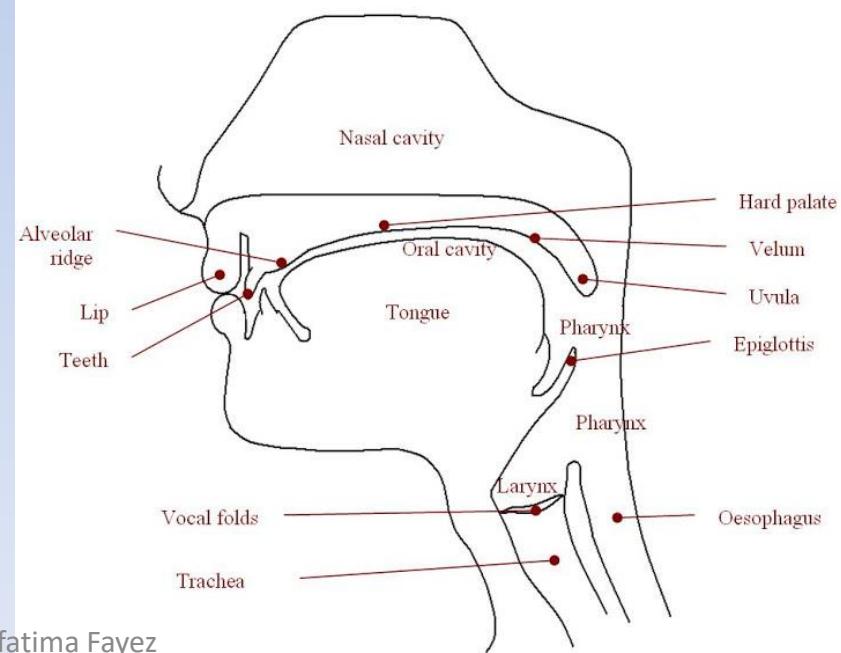
# Organs of speech

## How do Phonicians Describe sounds?

**Consonants:** Are pronounced by stopping the air from flowing freely through the mouth.

**Example:**

/b/,/p/,/m/.



# Organs of speech

## How do Phoneticians Describe sounds?

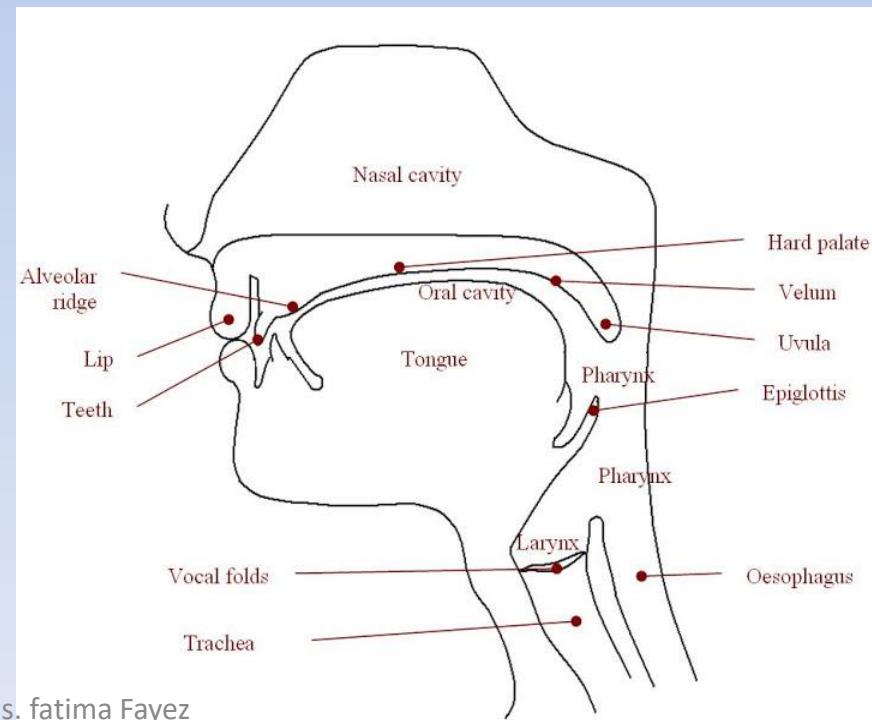
b. Vowels are produced when the air flows out through the mouth without being blocked by the teeth, tongue or lips.

**Example:**

**teach, books**

**rich, tuck**

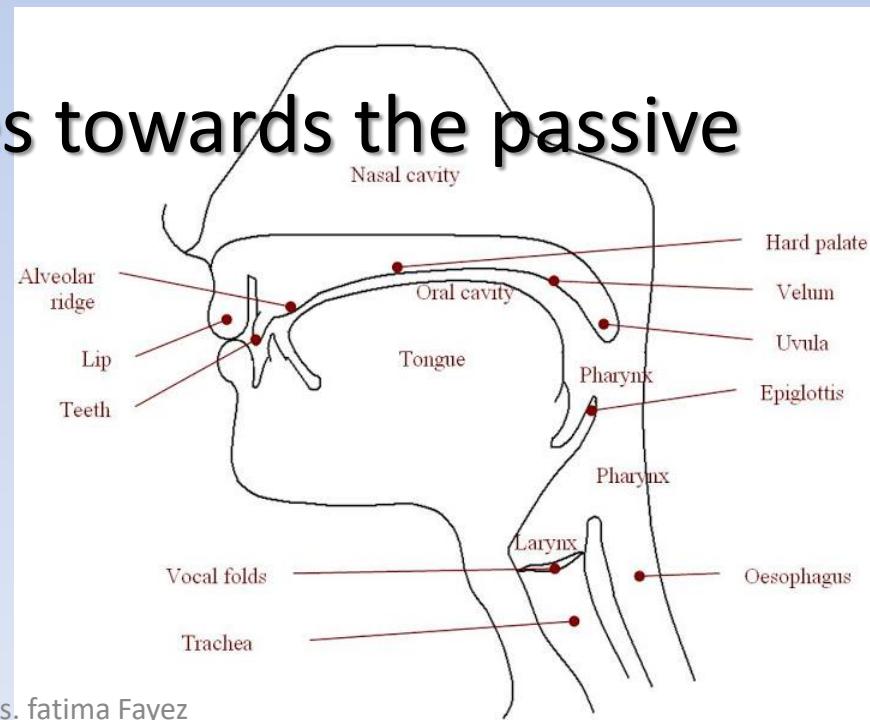
**rough, bought**



# Organs of speech

## How do Phoneticians Describe sounds?

- c. Active and Passive Articulators: Articulators (organs) are generally involved in the production of sounds.
- Active articulator moves towards the passive articulator.



## **4- Consonants:**

**Consonants are described according to two parameters:**

- 1- Manner of Articulation : according to the manner (how) in which the sounds are produced.**
- 2- Place of Articulation: refers to the point (where) at which the two articulators meet or come close to each other.**

**(table on page 38)**

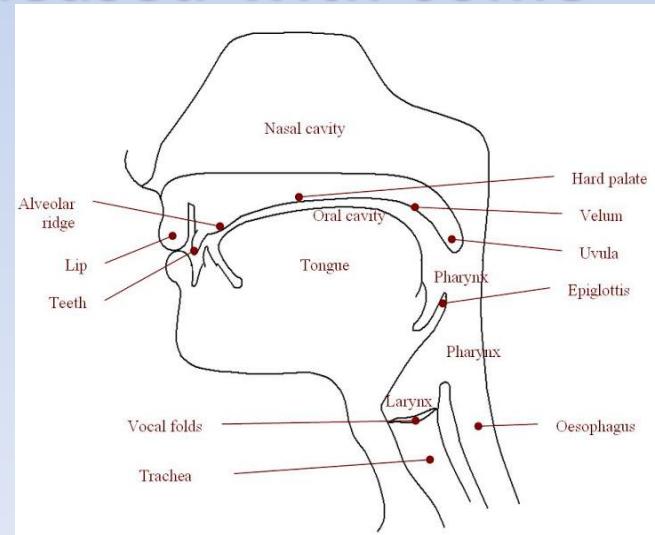
# 3- Consonants: Manner of Articulation

Phoneticians recognize 24 English consonant sounds.

1. Stop/ Plosive: the air stream is completely stopped in the vocal tract. Then after the air builds up the air stream is released with some kind of explosion.

In English there are 6 stops.

Do you know them??

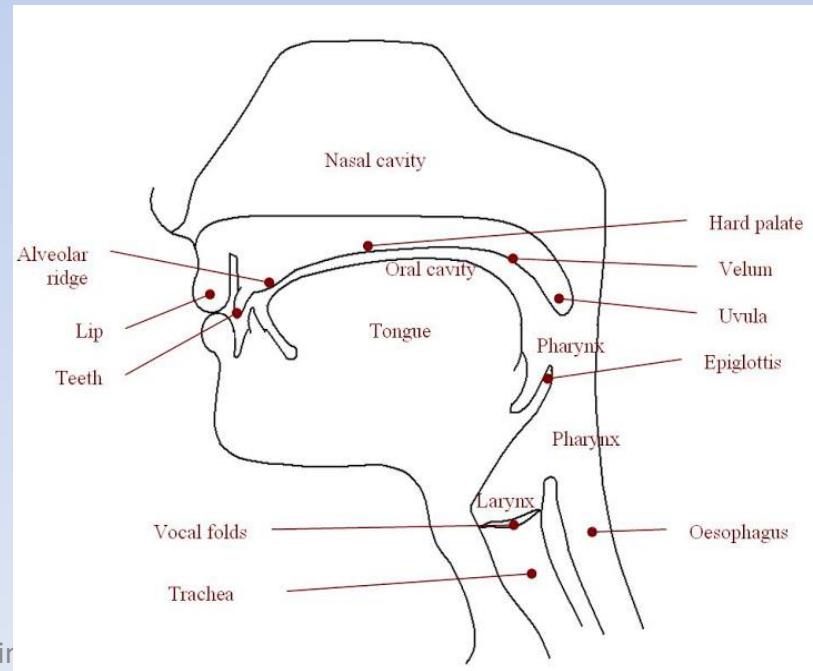


# 3- Consonants: Manner of Articulation

## 2. Fricative

**There is no complete closure of the air passage.**

**It is narrowed so the air rubs against the organs of speech.**



## **3- Consonants: Manner of Articulation**

- There are nine fricative consonants. Can you name them?**
- *f, v, θ ,ð ,s ,z, ʃ , ʒ , h***
- Which sounds are fricative and which are plosives? ( PP 36-37)**

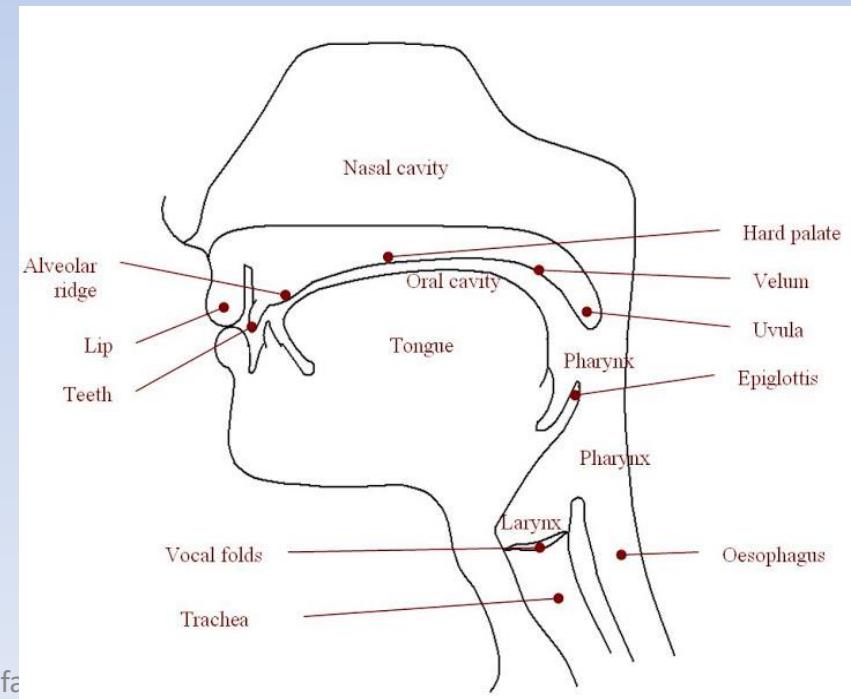
# 3- Consonants: Manner of Articulation

## 3. Affricate

There is first a total closure then it allows the air to pass through a narrow passage.

(2 sounds)

/tʃ/, / dʒ/



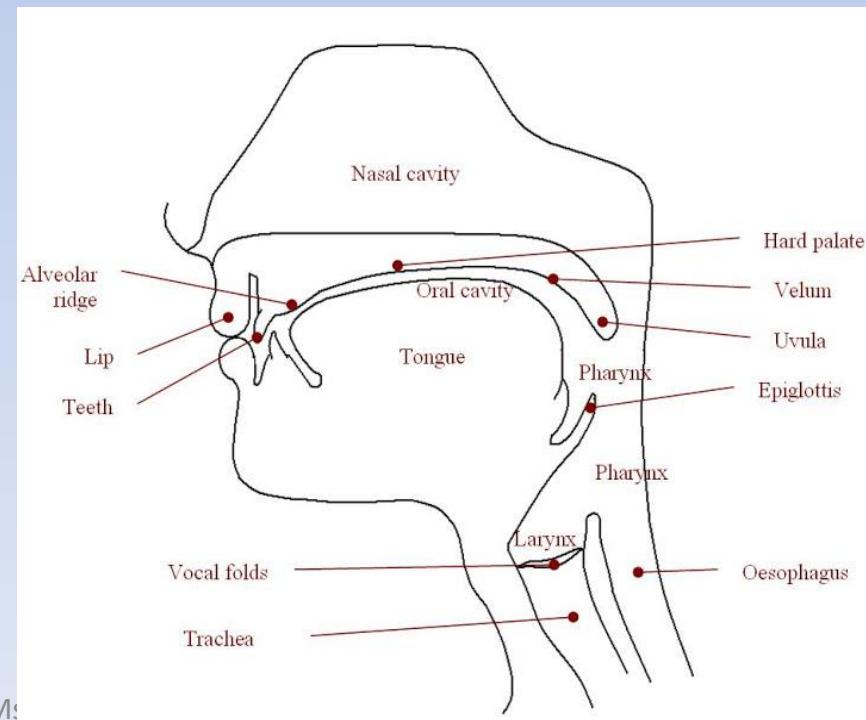
# 3- Consonants: Manner of Articulation

## 4- Nasal

The velum is lowered so the air passes through the nose.

3 sounds:

/m/, /n/, /ŋ/



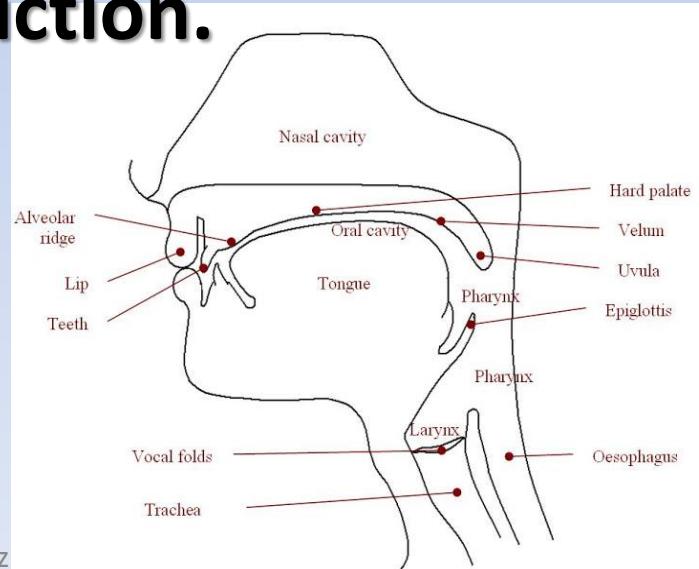
# 3- Consonants: Manner of Articulation

## 5- Approximant or glide

The active articulator (back of the tongue)  
moves towards the passive articulator  
without a point of contact. The air glides/  
moves freely without any friction.

2 sounds:

/w/, /j/



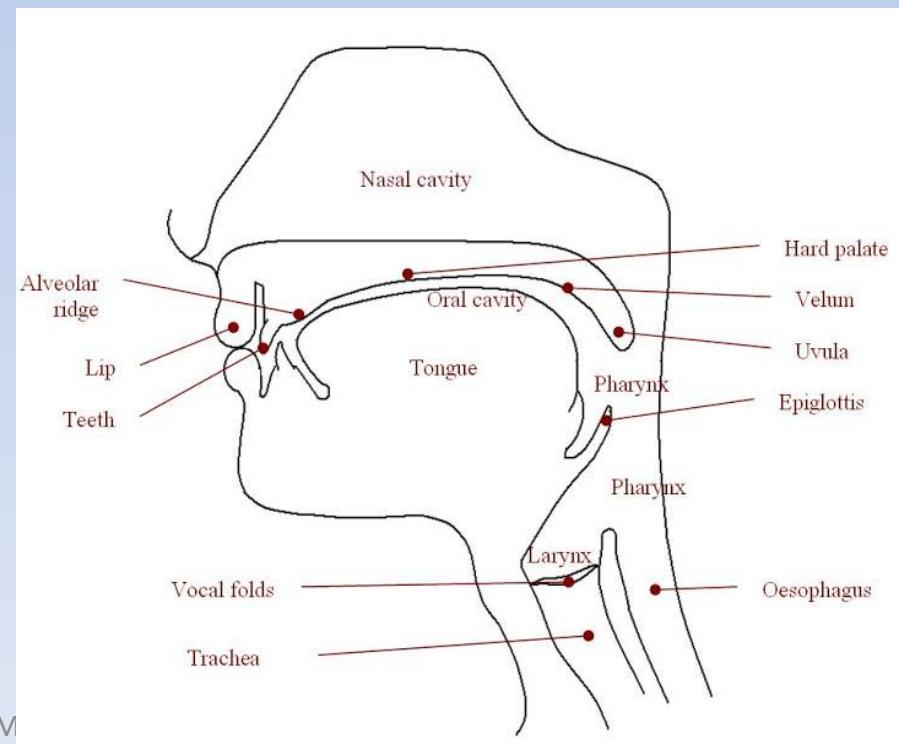
# 3- Consonants: Manner of Articulation

## 6- Lateral Approximant

The air flows through the sides of the tongue.

1 sound:

/l/



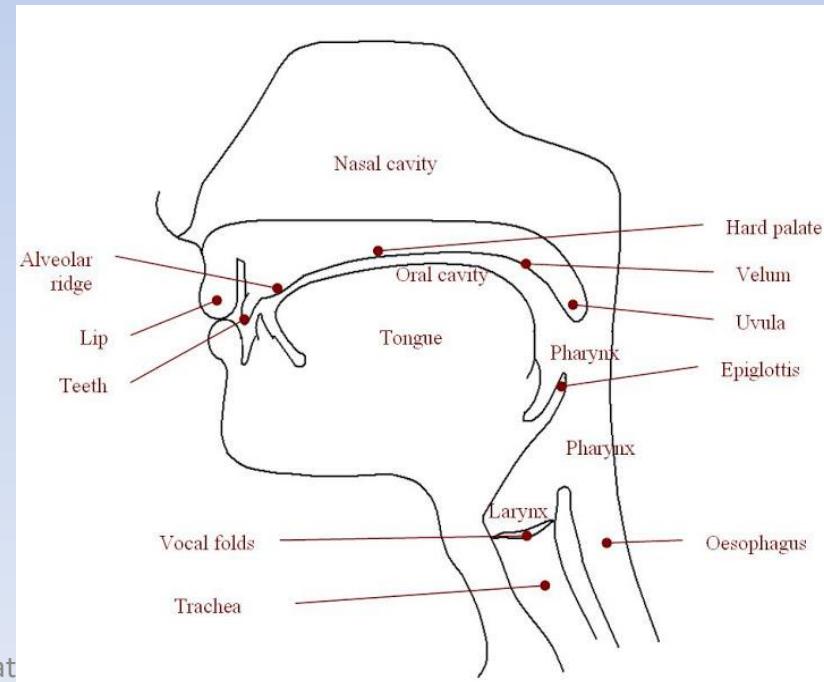
# 3- Consonants: Manner of Articulation

## 7- Frictionless continuant

- It is neither a stop nor a fricative. The closure of the vocal tracts is incomplete , allowing continuous passage of breath.

1 sound:

/ r /



## **4- Consonants: Place of Articulation**

**The place of articulation is Where  
two articulators meet or come  
close to each other.**

## **4- Consonants: Place of Articulation**

### **1- Bilabial:**

**The articulators that take place  
in producing the sound is the  
two lips**

**/p/, /b/, /m/**

## **4- Consonants: Place of Articulation**

**2- Labio-dental (lip and teeth)**

**The active articulator is the  
tongue and the passive is the  
upper front teeth**

**/f/, /v/**

## **4- Consonants: Place of Articulation**

### **3- Labial-velar**

**There are simultaneous stricture (closure) the at lips and between the back of the tongue and the soft palate.**

**/w/**

## **4- Consonants: Place of Articulation**

### **4- Dental**

**The active articulator is the tip of the tongue and the passive articulator is the upper front teeth.**

**/θ/, / ð /**

**( the first sound in thick and that)**

## **4- Consonants: Place of Articulation**

### **5- Alveolar**

**The active articulator is the tip or the blade of the tongue and the passive is the alveolar ridge.**

**/t/, /d/, /n/, /s/, /z/, /l/, /r/**

## **4- Consonants: Place of Articulation**

### **6- Post-alveolar / Palato-aleolar**

**The active articulator is the blade of  
the tongue and the passive  
articulator is the alveolar ridge.**

**/ s / / ʒ /**

**/ tʃ / / dʒ /**

**ship and leisure**

## **4- Consonants: Place of Articulation**

### **7- Palatal**

**The active articulator is the front of  
the tongue and the passive  
articulator is the hard palate.**

**/j/**

**yesterday**

## **4- Consonants: Place of Articulation**

### **8- Velar**

**The active articulator is the back of the tongue and the passive articulator is the soft palate.**

**/k/, /g/, /ŋ/**

**Kick; gone; bang**

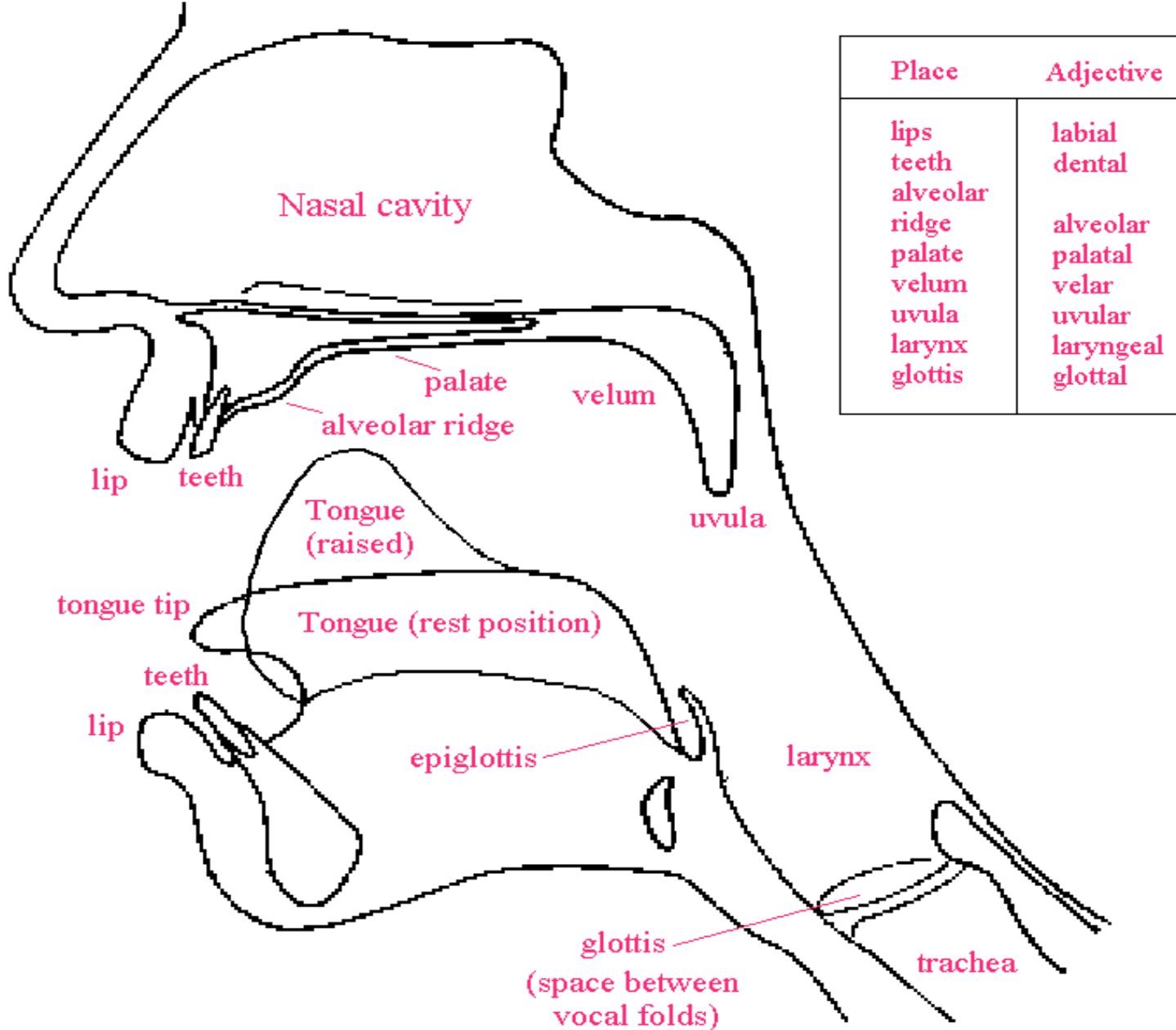
## **4- Consonants: Place of Articulation**

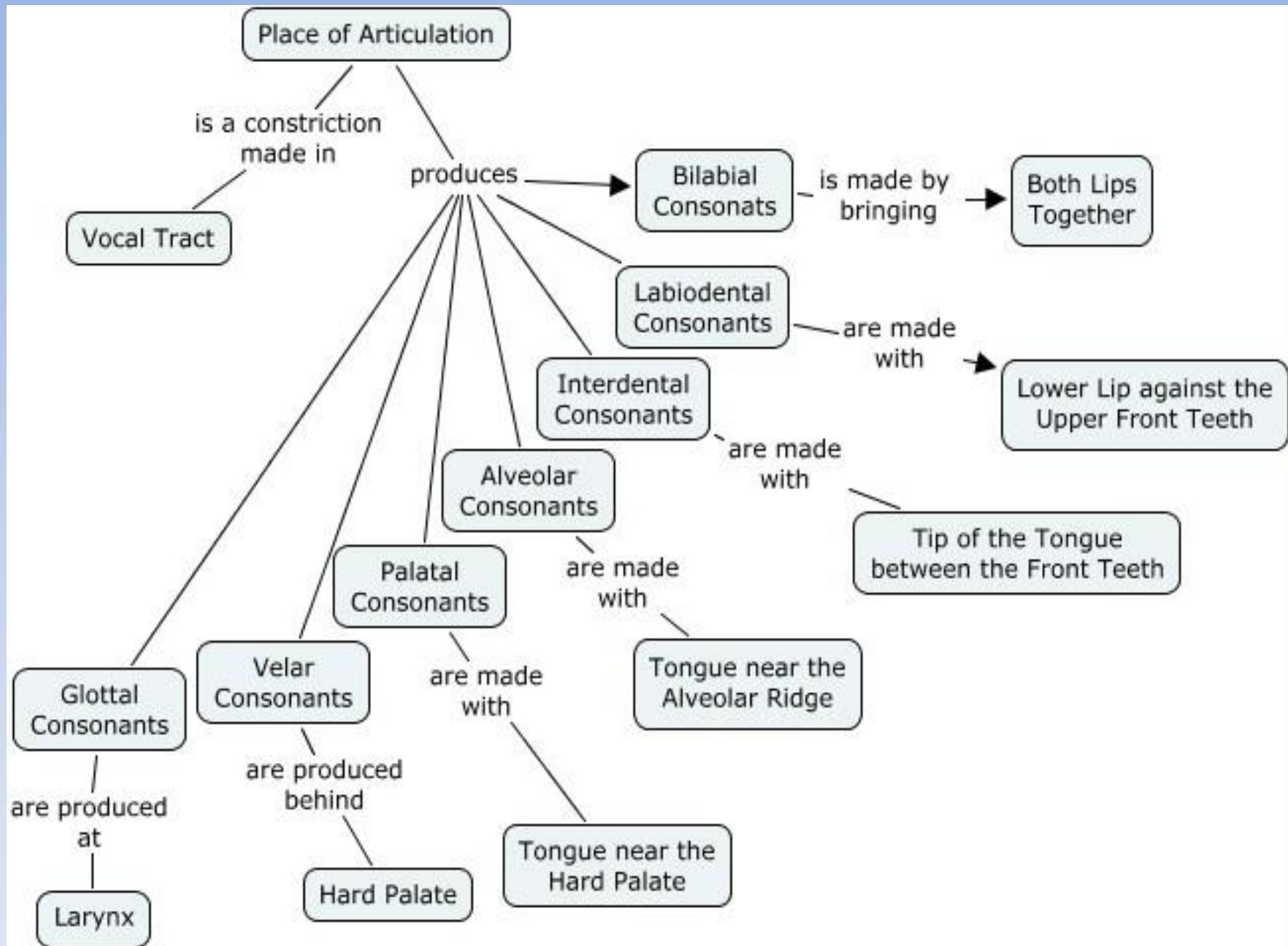
### **9- Glottal**

The vocal cords produce the glottal sounds/ no friction. The sound comes from the glottis. The glottis is the opening between the vocal cords.

**/h/**

**horse**





# **Summary**

**Activities**

**on pp 40- 42**

**New words**

**CB pages 42/43**